

REMARKS

Claims 1, 2, 5-14, 16 and 17 are pending in the application.

Among other things, independent claims 1 and 17 have been amended to clarify Applicant's claimed invention.

REJECTION OF CLAIMS 1, 8-11 and 17

Claims 1, 8-11 and 17 are rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 5,412,652 (Lu) in view of U.S. Patent No. 5,103,447 (Takiyasu et al). Applicants respectfully traverse the rejection for the following reasons.

With reference to Applicant's claim 1, recited therein is SONET/SDH transmission device 12, as shown in Fig. 3 of the instant application, which includes LAN interface 15, multiplex/demultiplex part 16 and SONET/SDH interface 17. The amended claim 1 further defines the LAN interface 15 in detail to include a LAN interface accommodation portion 21, a traffic monitor 25, a frame converter 22, a path selector 23, and a packet switch controller 24, in accordance with Fig. 9 of the instant application.

In particular, the invention as recited in claim 1 uses the path selector, which switches a transmission path for the LAN data to either a fixed band side or a shared band side according to the traffic of LAN data monitored by the traffic monitor, so that the traffic of constantly changing LAN data can be accommodated.

Claim 2 further recites the frame converter in detail, while claims 5-7 recite the path selector in detail. Claim 8 defines the packet switch controller in detail. Independent claim 17 is amended to define an inter-LAN communication system so as to include the SONET/SDH transmission device of claim 1.

The present invention defines the LAN type connection, which is synchronous, between segments, each connected through a SONET/SDH transmission device at a node of a synchronous network of a ring configuration, as shown in Fig. 2 of the application.

Lu, on the other hand, only discloses SONET ring network, which is synchronous, but is silent as to any detail of a transmission device at each node to provide LAN type connection, which is asynchronous, as recited in Applicant's claim 1. More specifically, it is stated in the Final Office Action that Lu discloses a "SONET/SDH transmission device connected at a node of a synchronous network of a ring configuration for controlling inter-communication between a plurality of LAN segments" (column 6, lines 48-55). Applicant respectfully disagrees. In this portion of the patent, Lu only discloses the following:

It provides a subnetwork management layer and automates the ring management functions. The ring based method provides a more systematic way to manage a SONET ring as a whole rather than managing separately each of the many individual nodes and links within the ring subnetwork. As this method results in more intelligence being embedded into each of the ring network elements, the ring network elements can advantageously perform ring management functions with minimum human intervention.

Nowhere does Lu teach or suggest a plurality of LAN segments, which are asynchronous, at a synchronous network node, as in Applicant's invention (please see Fig. 3, element 11 in the instant application).

Furthermore, it is asserted in the Final Office Action that Lu discloses "a LAN interface including ..." (column 6, lines 11-12). Again, Applicant respectfully disagrees. Here, Lu only discloses the following:

Referring first to FIG. 10, the network element 100 includes a pair of high speed function blocks 101, 101', processing functional block 102, a NM communication module 103, a controller 104, low-speed unit 105, and a power/clock functional block 106. The

high-speed functional blocks 101, 101' are respectively coupled to the optical media 2 that interfaces adjacent nodes to one another.

According to Lu, the network element 100 does not refer to any LAN interface, LAN network, or any LAN segments, as in Applicant's invention (please see Fig. 9 in the instant application). In Lu, "adjacent nodes" refer to the nodes on SONET network itself, not another network connected at a SONET node.

Since Lu fails to disclose a LAN network type connection among segments at a node of a synchronous network of a ring configuration, it then follows that Applicant's elements that comprise the LAN interface, such as 1) a LAN interface accommodation portion, 2) a traffic monitor, 3) a frame converter, 4) a path selector, and 5) a packet switch, as recited in Applicant's claim 1, cannot be disclosed by Lu. None of those recited features of the present invention is taught or suggested by Lu, contrary to the assertions in the Final Office Action.

Takiyasu discloses a ring LAN system, which interconnects a plurality of sub-networks. This reference is used in the Final Office Action only for the proposition of forming a packet of LAN data recited in Applicant's claim 1. Even if, for the sake of argument, it is assumed that Takiyasu teaches forming a packet of LAN data, Takiyasu still does not disclose any other element of the SONET/SDH transmission device of Applicant's claim 1, such as a LAN interface, a multiplex/demultiplex part, and a SONET/SDH interface. Thus, this patent fails to supplement Lu to cure its deficiencies. For this reason, the combination of Lu and Takiyasu does not result in the present invention as recited in claim 1.

Accordingly, Applicant respectfully submits that independent claim 1 is not rendered obvious by Lu and Takiyasu, and is thereby allowable. In addition, Applicant repeats substantially the above arguments in reference to independent claim 17, and respectfully submits that this claim is patentably distinguishable over Lu and Takiyasu, and is thereby allowable. As

claims 8-11 each depend from one of allowable claims 1 and 17. Applicant respectfully submits that claims 8-11 are also allowable for at least this reason.

REJECTION OF CLAIM 2

Claim 2 is rejected under 35 U.S.C. §103 as being unpatentable over Lu in view Takiyasu and further in view of U.S. Patent No. 5,809,012 (Takase et al). Applicant respectfully traverses the rejection for the following reasons.

Claim 2 depends from allowable claim 1. As stated above, the combination of Lu and Takiyasu fails to disclose all the features of the present invention as recited in independent claim 1. Takase is relied upon only for the proposition of a buffer. Even if, for the sake of argument, it is assumed that Takase teaches a buffer, Takase still does not disclose any other element of the SONET/SDH transmission device, such as a LAN interface, a multiplex/demultiplex part, and a SONET/SDH interface. Thus, this patent fails to supplement Lu and Takiyasu to cure their deficiencies. For this reason, the combination of Lu, Takiyasu and Takase does not render obvious the present invention as recited in claim 2.

REJECTION OF CLAIMS 5-7

Claims 5-7 are rejected under 35 U.S.C. §103 as being unpatentable over Lu in view Takiyasu and further in view of U.S. Patent No. 5,337,313 (Buchholz et al). Applicant respectfully traverses the rejection for the following reasons.

Claims 5-7 depend from allowable claim 1. As stated above, the combination of Lu and Takiyasu fails to disclose all the features of the present invention as recited in independent claim 1. Buchholz is relied upon only for the proposition of packet sequence information. Even if, for the sake of argument, it is assumed that Buchholz teaches this feature, Buchholz still does not disclose any other element of the SONET/SDH transmission device, such as a LAN interface, a

multiplex/demultiplex part, and a SONET/SDH interface. Thus, this patent fails to supplement Lu and Takiyasu to cure their deficiencies. For this reason, the combination of Lu, Takiyasu and Buchholz does not render obvious the present invention as recited in claims 5-7.

REJECTION OF CLAIMS 12-14 and 16

Claims 12-14 and 16 are rejected under 35 U.S.C. §103 as being unpatentable over Lu in view Takiyasu and further in view of U.S. Patent No. 6,404,735 (Beshai et al). Applicant respectfully traverses the rejection for the following reasons.

Claims 12-14 and 16 depend from allowable claim 17. As stated above, the combination of Lu and Takiyasu fails to disclose all the features of the present invention as recited in independent claim 1. Beshai is relied upon only for the proposition of band sharing connections. Even if, for the sake of argument, it is assumed that Beshai teaches this feature, Beshai still does not disclose any other element of the SONET/SDH transmission device, such as a LAN interface, a multiplex/demultiplex part, and a SONET/SDH interface. Thus, this patent fails to supplement Lu and Takiyasu to cure their deficiencies. For this reason, the combination of Lu, Takiyasu and Beshai does not render obvious the present invention as recited in claims 12-14 and 16.

CONCLUSION

An earnest effort has been made to be fully responsive to the Examiner's rejections. In view of the above amendments and remarks, it is believed that the present application is in condition for allowance. Passage of this application to allowance is earnestly solicited. However, if for any reason the Examiner should consider this application not to be in condition for allowance, he is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

We respectfully request that all fees relating to this application be charged to Deposit
Acct. No. 50-1290.

Respectfully submitted,



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